AMENDMENTS TO THE CLAIMS

1-4. (Cancelled)

5. (Previously Presented) A method for classifying a service class for transmission of packet data in a two-way communication network which supports transmission of packet data having various quality of service (QoS), comprising the steps of:

measuring a number of detected packet data;

dividing a jitter value by the measured number of packet data;

determining a parameter based on whether or not the divided value is larger than a threshold value associated with traffic characteristics of the packet data transmission; ~~and~~

calculating a value by using the parameter; and

using the calculated value to classify the service class of the packet data.

6. (Previously Presented) The method as recited in claim 5, wherein the steps of measuring and dividing are implemented over a forward link and a reverse link.

7. (Previously Presented) The method as recited in claim 5, wherein the determining step comprises:

determining that the service class has a service for a predetermined period of time representing the packet data transmission occurs more than a predetermined number of times, if the divided value is smaller than the threshold value; and

determining that the service class has a service for a predetermined period of time representing the packet data transmission does not occur more than the predetermined number of times, if the divided value is at least equal to the threshold value.

8. (Previously Presented) A method for classifying a service class for transmission of packet data in a two-way communication network which supports transmission of packet data having various quality of service (QoS), comprising the steps of:

determining whether a first parameter associated with characteristics of the service class

identifies a symmetric service corresponding real time data or not;

determining whether a second parameter associated with a period of the service class identifies a service for a predetermined period of time representing the packet data transmission occurs more than a predetermined number of times or not;

calculating a value using the first and second parameters; and

using the calculated value to classify the service class of the packet data.

9. (Previously Presented) The method as recited in claim 8, wherein the step of determining whether the first parameter associated with the characteristics of the service class identifies the symmetric service corresponding to the real time data or not comprises the steps of:

measuring a total number of packet data for a period of time associated with the classification of service classes; and

determining that the first parameter identifies the symmetric service, when the measured number of packet data is larger than a threshold value associated with characteristics of the service class.

10. (Previously Presented) The method as recited in claim 9, wherein the measuring step is implemented over a forward link and a reverse link.

11. (Previously Presented) The method as recited in claim 8, wherein the step of determining whether the second parameter associated with the period of the service class identifies the service for the predetermined period of time representing the packet data transmission occurs more than the predetermined number of times or not comprises the steps of:

measuring a number of detected packet data;

dividing a jitter value by the measured number of packet data; and

determining that the second parameter identifies the service for the predetermined period of time representing the packet data transmission occurs more than the predetermined number of times, when the divided value is larger than a threshold value associated with the period of the service class.

12. (Previously Presented) The method as recited in claim 11, wherein the steps of measuring

and dividing are implemented over a forward link and a reverse link.

13-19. (Cancelled)

20. (Original) A service class classifying apparatus for transmission of packet data in a two-way communication network which supports transmission of packet data having various quality of service (QoS), comprising:

a main processor for measuring a number of detected packet data, dividing a jitter value by the measured number of packet data, determining a parameter based on whether or not the divided value is larger than a threshold value associated with traffic characteristics of the packet data transmission, and calculating a value to classify the service class of the packet data by using the determined parameter; and

a switch for determining paths of traffic.

21. (Original) The service class classifying apparatus as claimed in claim 20, wherein the main processor measures the total number of packet data that is transmitted over one of a forward link and a reverse link.

22. (Previously Presented) The service class classifying apparatus as claimed in claim 20, wherein the main processor determines whether the service class is a service for a predetermined period of time representing the packet data transmission occurs more than a predetermined number of times, if the divided value is smaller than the threshold value and determines that the service class is a service for a predetermined period of time representing the packet data transmission does not occur more than the predetermined number of times, if the divided value is at least equal to the threshold.

23. (Original) The service class classifying apparatus as claimed in claim 20, further comprising a gate way (GW) for supporting transfer of protocol between different networks.

24. (Previously Presented) A service class classifying apparatus for transmission of packet

data in a two-way communication network which supports transmission of packet data having various quality of service (QoS), comprising:

a main processor for determining whether a first parameter associated with characteristics of the service class is a symmetric service corresponding to real time data or not, for determining whether a second parameter associated with a period of the service class is a service for a predetermined period of time representing the packet data transmission occurs more than a predetermined number of times or not, for calculating a value using the first and second parameters, and for using the calculated value to classify the service class of the packet data.

25. (Original) The service class classifying apparatus as claimed in claim 24, wherein the main processor further measures a total number of packet data for a period of time associated with the classification of service classes, and determines the first parameter based on whether the measured number of packet data is larger than a threshold value associated with characteristics of the service class.

26. (Original) The service class classifying apparatus as claimed in claim 24, wherein the main processor further measures the total number of packet data that is transmitted over one of a forward link and a reverse link.

27. (Previously Presented) The service class classifying apparatus as claimed in claim 24, wherein the main processor further measures a number of detected packet data, divides a jitter value by the measured number of packet data, and determines the second parameter based on whether or not the divided value is larger than a threshold value associated with the period of the service class.

28. (Original) The classifying service class apparatus as claimed in claim 24, wherein the main processor further measures the total number of packet data that is transmitted over one of over a forward link and a reverse link.